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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/289,067	04/08/1999	DAVID R. IRVIN	1280.00101	8219

24239 7590 04/22/2003

MOORE & VAN ALLEN, PLLC
2200 W MAIN STREET
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DURHAM, NC 27705

EXAMINER

NGUYEN, THUAN T

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 04/22/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

20

Office Action Summary

Application No.
09/289,067

Applicant(s)
Irvin et al.

Examiner
Thuan Nguyen

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2685



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 7-12, 15-17, 19, 23, 25, and 32-48 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 7-12, 15-17, 19, 23, 25, and 32-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ | 6) <input type="checkbox"/> Other: |

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DETAILED ACTION

Remarks

1. Claims 2-3, 5-6, 13-14, 18, 20-22, 24 and 26-31 were canceled in the amendment (paper no. 17). Pending claims are 1, 7-12, 15-17, 19, 23, 25, and new claims 32-48.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 7-12, 15-17, 19, 23, 25, and new claims 32-48 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 17 is objected to because of the following informalities: in the last paragraph, "--to active-- the first mobile radio terminal" should be corrected as "--to activate-- the first mobile radio terminal" instead. Appropriate correction is required.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 7-12, 15-16, and 32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al. (U.S. Patent No. 5,666,661 or "Grube" hereinafter) in view of Raith (U.S. Patent No. 6,493,550 B1).

Regarding claim 1, Grube discloses a method of generating a control signal, i.e., control information in the control channel for controlling or generating communication request between the mobile terminal unit and the system controller (Fig. 1/item 120, and col. 1/lines 23-32, and col. 2/lines 44-56), comprising the steps of: determining the location of a first mobile radio terminal; determining the location of a second mobile radio terminal; comparing the locations of the first mobile radio terminal and the second mobile radio terminal; and generating a control signal in response said comparing, wherein the control signal is an activation signal that activates the first mobile radio terminal if the locations of the first mobile radio terminal and the second mobile radio terminal are within a specified distance, i.e., the initiating mobile unit and the target mobile unit are both identified by the resource controller based on their own and separate

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locations, and the control signal regarding as an activation signal in the form of a message conveying on the control channel is generated or activated based on the comparison between two locations of the mobile units within a specified distance (Fig. 2, and col. 2/lines 44-67).

Grube does not further mention the step of “wherein the second mobile radio terminal permits operation of the first mobile radio terminal only when the first mobile radio terminal and the second mobile radio terminal are either within, or separated by, a specified distance”; however, Raith teaches an exact same technique as Raith discloses in a Bluetooth communication system for short range communication (Figs. 2 & 3 & 5, col. 3/lines 28-43, col. 4/lines 20-48, col. 6/line 48 to col. 7/line 56) while a handset communication device (as shown in Fig. 4) has an RF sensitive device that can detect the proximity of a proximity system and/or a private system that the handset can start to engage in a short-range communication with other handsets within a specified geographic area, or namely a private system network 310 (as illustrated in Fig. 3); particularly, the proximity detector can be incorporated into a SIM card (col. 8/lines 43-57) wherein the authorization code or key permitting operation can be used to permit or authorize and/or unauthorize the use of the handset directly to another one within, or separated by, a specified geographic location (col. 6/lines 5-16, col. 7/lines 30-56 & col. 8/lines 43-57) or a private network (col. 9/lines 18-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grube’s system with Raith’s teaching technique of having a proximity detector installed within a SIM card as a key means (authorization key) to permit the generation of the control signals from one mobile radio terminal

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to other mobile terminals in order to perform the direct call connection between mobile terminals in two-way short range communication as taught by Raith.

(Claim 2-6 were canceled).

As for claim 7, Grube further discloses “wherein the first mobile radio terminal and the second mobile radio terminal operate in a wireless communications system including a base station and a location server communicating therewith”, i.e., base stations 104 & 105 are handling the operation of wireless communication of mobile units 102 & 103 based on the comparison and generating steps are performed by a location server (understood) within the communication resource controller 101 (Grube, Fig. 1 and col. 2/lines 31-40).

As for claim 8, Grube further discloses “wherein at least one of the determining, comparing and generating steps are performed by the first mobile radio terminal”, i.e., the comparison procedure is done at one of the mobile unit (Fig. 3/steps 300 & 301 & 302).

As for claim 9, Grube further discloses “wherein the determining steps are performed by using at least one of a global positioning system and a cellular positioning system” (col. 2/lines 31-43).

As for claim 10, Grube discloses “wherein the comparing step further comprises the step of comparing a current time with a preselect time”, i.e., two units are mobile radio terminals and they are constantly moving; thus the distance between them is variable. Therefore, the procedure as illustrated in Fig. 3 can be consistently repeating in terms of the current time and then the

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preselect time, for example, within 30 minutes or an hour for conversation, for automatically checking the favorable distance between them (col. 3/line 53 to col. 4/line 9).

Regarding claim 11, in further view of claim 1 above, Grube discloses a method of generating a control signal comprising the steps of "determining the location of at least two mobile terminals; comparing at least one of the specific location of the at least two mobile radio terminals to at least one predetermined location, and the specific location of the at least two mobile radio terminals and time to at least one predetermined location and time", i.e., the initiating mobile unit and the target mobile unit are both identified by the resource controller based on their own and separate locations, and the control signal regarding as an activation signal in the form of a message conveying on the control channel is generated or activated based on the comparison between two locations of the mobile units within, or separated by, a specified distance (Fig. 2, and col. 2/lines 44-67) as well as at least one predetermined location such as one from a group call in addition to two communication units (two mobile radio terminals of concerned), whereas the location and time of the group call members are identified by the system controller (col. 3/lines 8-17); furthermore, two mobile radio terminals and other members in the group call are mobile and they are constantly moving; thus the distance between them is variable. Therefore, the procedure as illustrated in Fig. 3 can be consistently repeating in terms of the current time and then the preselect time, for example, within 30 minutes or an hour for conversation, for automatically checking the favorable distance between them (col. 3/line 53 to col. 4/line 9).

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Grube does not further address that “generating a control signal in response said comparing, wherein the control signal may enable or inhibit a wide range variety of applications”; Raith teaches an exact same technique as Raith discloses in a Bluetooth communication system for short range communication (Figs. 2 & 3 & 5, col. 3/lines 28-43, col. 4/lines 20-48, col. 6/line 48 to col. 7/line 56) while a handset communication device (as shown in Fig. 4) has an RF sensitive device that can detect the proximity of a proximity system and/or a private system that the handset can start to engage in a short-range communication with other handsets within a specified geographic area, or namely a private system network 310 (as illustrated in Fig. 3); particularly, the proximity detector can be incorporated into a SIM card (col. 8/lines 43-57) wherein the authorization code or key permitting operation can be used to permit or authorize and/or unauthorize the use of the handset directly to another one within, or separated by, a specified geographic location (col. 6/lines 5-16, col. 7/lines 30-56 & col. 8/lines 43-57) or a private network (col. 9/lines 18-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grube’s system with Raith’s teaching technique of having a proximity detector installed within a SIM card as a key means (authorization key) to permit or inhibit the generation of the control signals or a wide range of applications (as suggested in Raith, col. 6/lines 5-16 for limiting some amount of information and/or two-way data transfer capability) from one mobile radio terminal to other mobile terminals in order to perform the direct call connection between mobile terminals in two-way short range communication as taught by Raith.

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Regarding claim 12, in view of claim 11 above, Grube teaches comprising “N mobile radio terminals, wherein $N \geq 2$; the comparing step comprises comparing the locations of the N mobile terminals with M different specified locations, wherein $M \leq N$; and the generating step comprises generating a control signal if at least one of the N mobile radio terminals is located at each of the M different specified locations”, i.e., N mobile terminals ≥ 2 and M different locations are addressed by Grube because a group call (understood that a group call is formed by two or more persons) is mentioned (see the Examiner’s discussion in claims 1, 11 above and col. 1/lines 25-32; and M represents the location of each moving radio terminals, then M must be $\leq N$ at different locations because mobile radio terminals are not stationary).

(Claims 13-14 were canceled).

Regarding claims 15-16, in further view of claim 11 above, these claims for “wherein the at least two mobile radio terminals comprise N mobile radio terminals, wherein $N \geq 2$; the comparing step comprises comparing the locations of the N mobile radio terminals with N specified locations assigned to each of the N mobile radio terminals, and the generating step comprises generating a control signal if each of the N mobile radio terminals is located at its assigned location” and “wherein the N specified locations include N different specified locations” are rejected for the reasons given in the scope of claims 11 and 12 as already disclosed in details above.

As for claims 32-41, these limitations are already addressed in claims 1, and 7-12 above, and these claims are rejected for the reasons given in the scope of claims 1, and 7-12 above.

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6. Claims 17, 19, 23, 25 and 42-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grube et al. (U.S. Patent No. 5,666,661) in view of Lachance (U.S. Patent No. 6,246,882) and Raith (U.S. Patent No. 6,493,550 B1).

Regarding claims 17 and 23, in the described “a method of generating a control signal comprising the steps of: receiving, at a location server, an initiation signal from a first mobile radio terminal, said initiation signal including the location of the first mobile radio terminal; transmitting, by the location server, a location query to a second mobile radio terminal; reporting, by the second mobile radio terminal, the location of the second mobile radio terminal in response to the location query; comparing, at the location server, the locations of the first and second mobile radio terminals; and generating a control signal based upon said comparison” and further in the step of “transmitting, by the location server, a location query to the first mobile radio terminal and a second mobile radio terminal”, Grube discloses everything (see claims 1 and 11 above) except that Grube does not mention to include “a location query” transmitted by a location server as claimed; however, such a technique of using “a location query” from a location server in requesting the location information from the mobile units is known in the art. In fact, Lachance discloses an exact same technique, in which “a location query” can be sent from a location node or location database to mobile users via a MSC and a base station (Lachance, col. 5/lines 39-52) and the step of determining the comparison the locations at the location server is followed (see col. 6/line 51 to col. 7/line 13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grube’s technique of handling

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communication between mobile units in close proximity with Lachance's technique of using a location query transmitted from a location server in order to obtain the location information or location updates from the mobile users as much often as possible as disclosed by Lachance.

Grube and Lachance do not further mention the step of generating a control signal based upon said "comparing and transmitting the control signal from the location server to the first mobile radio terminal to activate the first mobile radio terminal for use if the locations of the first and second mobile radio terminals are either within, or separated by, a specified distance"; however, Raith teaches an exact same technique as Raith discloses in a Bluetooth communication system for short range communication (Figs. 2 & 3 & 5, col. 3/lines 28-43, col. 4/lines 20-48, col. 6/line 48 to col. 7/line 56) while a handset communication device (as shown in Fig. 4) has an RF sensitive device that can detect the proximity of a proximity system and/or a private system that the handset can start to engage in a short-range communication with other handsets within a specified geographic area, or namely a private system network 310 (as illustrated in Fig. 3); particularly, the proximity detector can be incorporated into a SIM card (col. 8/lines 43-57) wherein the authorization code or key permitting operation can be used to permit or authorize and/or unauthorize the use of the handset directly to another one within, or separated by, a specified geographic location (col. 6/lines 5-16, col. 7/lines 30-56 & col. 8/lines 43-57) or a private network (col. 9/lines 18-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Grube's system with Raith's teaching technique of having a proximity detector installed within a SIM card as a key means

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(authorization key) to permit and inhibit the generation of the control signals from one mobile radio terminal to other mobile terminals in order to perform the direct call connection between mobile terminals in two-way short range communication as taught by Raith.

Regarding claims 19 and 25, Raith discloses the step of “wherein the first mobile radio terminal comprises a mobile communication device, and wherein the second mobile radio terminal comprises a key that may alternatively activate, deactivate, lock and unlock the mobile communication device only when the locations of the mobile communication device and the key are within the specified distance” (see the Examiner’s discussion in claims 1 and 11 for the permitting and/or inhibiting for the generation of the control signals or a wide range of applications in Raith, col. 6/lines 5-16 for limiting some amount of information and/or two-way data transfer capability from one mobile radio terminal to other mobile terminals above).

As for claims 42-48, these claims are rejected for the reasons given in the scope of the combination of claims 1, 7-12, 15-16, 17, and 19 as already discussed in details above.

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Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for Technology Center 2600 only)

*Hand-delivered responses should be brought to Crystal Park II,
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

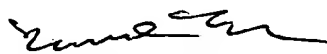
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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (703) 308-5860. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.

Tony T. Nguyen
Art Unit 2685
April 16, 2003


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600



**UNITED STATES DEPARTMENT OF COMMERCE
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See Amendments